Gould, R.E.

An evaluation of an intensive program in word analysis
in second grade.

Thesis 1949

DEMCO
FOR REFERENCE
Do Not Take From This Room

BOSTON UNIVERSITY
SCHOOL OF EDUCATION

LIBRARY

Ed.
Thesis
Gould, R.E.
1949

The Gift of Rita E. Gould.

stored

FOR REFERENCE
Do Not Take From This Room

31220

stored

BOSTON UNIVERSITY
SCHOOL OF EDUCATION

Thesis

AN EVALUATION OF AN INTENSIVE PROGRAM IN WORD ANALYSIS IN SECOND GRADE

Submitted by
Rita Elizabeth Gould
(B. S., Teachers College of Connecticut, New Britain, 1942)

In partial fulfillment of the requirements
for the degree of Master of Education

1949

Boston University
School of Education
Library

[illegible]

[illegible]

[illegible]

31220

First Reader: Helen A. Murphy, Associate Professor of Education

Second Reader: Donald D. Durrell, Professor of Education

Third Reader: Helen Blair Sullivan, Professor of Education

ACKNOWLEDGMENTS

Sincere appreciation is extended to Dr. Helen A. Murphy, Associate Professor of Education, Boston University, for her assistance in carrying out this study.

The writer wishes to express her gratitude to Harold R. French, Principal; the faculty of Jennings School, Bristol, Connecticut; and to Frances Johns Casey, who taught the control group and helped in scoring the tests.

TABLE OF CONTENTS

Page

LIST OF TABLES.................................... iii

LIST OF FIGURES................................... iv

INTRODUCTION...................................... 1

DEFINITIONS....................................... 2

CHAPTER I Summary of Previous Research............. 3

CHAPTER II Plan of the Study....................... 17

CHAPTER III Analysis of Data....................... 20

CHAPTER IV Summary and Conclusions................. 28

Suggestions for Further Research.................. 32

BIBLIOGRAPHY...................................... 33

LIST OF TABLES

Table		Page
I	Comparison of Chronological Ages and Mental Ages in Years and Months..............................	21
II	Reading Achievement of Control Group over Eight Week Period.....................................	26
III	Reading Achievement of Experimental Group over Eight Week Period...............................	26
IV	Comparison of Reading Achievement of Control and Experimental Groups on Form R in October........	27
V	Comparison of Reading Achievement of Control and Experimental Groups on Form S in December.......	27

LIST OF FIGURES

Figure Page

1 Distribution of Mental Ages of Control Group...... 22

2 Distribution of Mental Ages of Experimental Group.. 23

3 Distribution of Chronological Ages of Control Group.. 24

4 Distribution of Chronological Ages of Experimental Group................................ 25

INTRODUCTION

It is the purpose of this study to ascertain if an intensive program in word analysis, over a given period, will increase achievement in reading in second grade.

Research has shown that training in word analysis is vital to well-rounded teaching of reading. It has also shown that many children have little need for specific training in word analysis. Yet there are many children who profit by being given this tool, and many reading difficulties have been remedied by giving children the ability to attack new words if this ability in them were lacking or poorly developed.

Two second grades, heterogeniously grouped, were used as the basis of this study to observe the differences in outcome of achievement tests in reading between a group receiving specific training in auditory and visual discrimination and a group not receiving the additional training.

DEFINITIONS OF TERMS

Word analysis[1]:

the act or process of analyzing the likenesses and differences among words, both as to form and meaning.

Auditory discrimination[2]:

the act of discerning the differences a among sounds, especially the sounds making up words; the distinguishing of one word, or word part, from another.

Visual discrimination[3]:

the process of distinguishing (or the ability to distinguish) one object from another.

Phonic method[4]:

a method of teaching reading based on the analysis of words into their basic speech sounds.

---

[1] Good, Carter, Editor, Dictionary of Education. McGraw-Hill Book Company, New York, 1945. p. 23.

[2] Ibid., p. 135.

[3] Ibid., p. 135.

[4] Ibid., p. 297.

CHAPTER I

SUMMARY OF PREVIOUS RESEARCH

It has been adequately proven that children need a tool to help them analyze new words. It is possible to build up a sight vocabulary to some extent, But by the last of the first grade, the sight vocabulary has grown to such a degree that it is impossible for the child to retain, in his memory, all the different words he has met. It is at this point that an intrinsic means of analyzing new words will be of great value to him. His vocabulary, with the various words and meanings, accumulates so rapidly that context clues, configuration and picture clues will not serve the purpose of word recognition.

Previously, the use of phonics had often been advocated as a method of teaching reading. The emphasis was placed on phonics for its own sake. The present interpretation is that of regarding phonics as merely one of many necessary techniques to be mastered by the child in learning to read fluently and independently. It must be accompanied by other skills in word recognition such as the development of an adequate sight vocabulary, use of context clues and reading for meaning.

While it is not expected that phonics will do a complete job of teaching reading, the right use of phonics will assist in word attack.

Relationship of word analysis to reading ability. Tiffin[1] and McKinnis made a study to determine to what degree phonic ability is related to ability in reading. Based on a reliable instrument to measure phonic ability, and compared with the results of reading tests, the outcome showed a significant relationship. The results also indicated that there is no significant relationship between phonic ability and chronological age, but that there is a relationship with mental age.

As a result of the thinking on the part of some educators that phonics lead to word, and thus slow, reading, and the opposite contention that phonics should hold an important place in the program, the investigators of the above problem concluded, from their study, that some phonics should be included. And in the case of extreme reading disability, intensified word analysis has shown definitely favorable influence on reading improvement.

The value of specific training in auditory and visual discrimination was demonstrated by Murphy[2]. Her research

---

1. Tiffin, J. and M. McKinnis, "Phonic Ability--Its Measurement and Relation to Reading Ability", School and Society, 51:190-192, February 10, 1940.

2. Murphy, Helen A., "An Evaluation of the Effect of Specific Training in Auditory and Visual Discrimination on Beginning Reading", Unpublished Ed.D. Thesis, Boston University, 1943.

dealing with an evaluation of the effect of specific training in auditory and visual discrimination on beginning reading, indicated that the experimental groups which received the specific training were definitely superior on tests measuring reading achievement to those groups which received no special training.

Readiness for word analysis. Much has been written in the field of reading readiness to the effect that the child can not learn to read until he has reached a certain stage in mental maturity. Dolch[1] claims that phonic analysis, and the ability to use such analysis, requires more mental ability than just learning to read through recognition alone. He conducted an experiment to ascertain at what point the child would have attained "phonic readiness". Two grades, first and second, were used in a school teaching an ordinary amount of phonics. He measured the child's mental development and his phonic attainment and observed the relationship. There was a marked relationship as was indicated by the correlation. It was interesting to note that some children of high mental age fail to gain an ability in phonics, but that the child of low mental age more frequently fails. He drew the conclusion from his study that a mental age of seven is

---

[1] Dolch, E. W. and Maurine Bloomster, "Phonic Readiness", Elementary School Journal, 38:201-205, November, 1937.

probably the lowest at which the child can make profitable use of phonic instruction. But early preliminary training may be begun.

When the child begins to notice likenesses and differences in word forms, initial training may be begun. The child may be made conscious of sounds and words sounding alike. Harrison[1] emphasises the importance of auditory training in relation to reading readiness. She found that readiness for word recognition is based upon the ability to hear and differentiate between sounds at the beginning of spoken words, the ability to hear rhyming endings, and to differentiate between endings not rhyming.

In view of the fact that acuity in auditory and visual discrimination is a skill which may be developed, it is of value to build toward readiness with suitable exercises, games and devices which will train the powers of observation. The child's natural inquisitiveness as to similarities and differences in words will be an aid in soliciting his interest.

To further emphasize the fact of the importance of early training, it was established by Murphy[2] and Junkins

---

1. Harrison, Lucille, "Developing Readiness for Word Recognition", Elementary English Review,23:122-131, March, 1946.

2. Murphy, Helen A. and Kathryn Junkins, "Increasing Rate of Learning in First Grade Reading", Education, 62÷37-39. September, 1941.

that the learning rate can be increased by giving them training in seeing differences and likenesses in words they see or hear. This indicates that children having difficulty in mastering the first stages of learning to read will benefit from training in auditory and visual discrimination.

The degree of word analysis training necessary and the need for its being functional: McKee[1] emphasizes the fact that training in word analysis is very necessary, yet it has its greatest value only when it is closely integrated with reading for meaning.

Wilson and Flemming[2] carried out a study which indicates the importance of attention being paid to form and sounds of letters. The evidence showed that the attention paid by young children in a progressive school to these forms and sounds of letters was a basic key to reading. They recommend, as a result of their work, that the child be given assistance in mastery of forms and sound in a functional way, not as phonic drill, but rather through methods which will function when the child wants to use the skill in his reading.

---

1. McKee, Paul, "Certain Matters of Importance in Teaching Reading", Elementary English Review, 16:115-118, April, 1937.

2. Wilson, F. and C. Flemming, "Letter Consciousness of Beginners in Reading, "Journal of Genetic Psychology, 53:273-285, 1938.

A moderate amount of informal word analysis, so Gates [1] and Russell disclose, is of more value than greater amounts of formal phonetic drill. They also bring out the point, previously mentioned in this study, that children of low reading scores profit less by the formal drill than would children of more ability. In their study, classes were divided into three groups: one receiving small amounts of word analysis training; the next group receiving moderate amounts; and the third group being exposed to greater amounts of regular phonetic drill. The study evidenced that programs offering little, or no, phonic training were as good as programs offering too much of the drill type, but that the programs which offer the informal or moderate amount were superior to the other two types.

special training in word analysis should not be comprised of material which is completely alien from regular reading material. The words and word elements to be used in phonetic exercises should have meaning for the child. Profitable use of phonics is contingent upon its serving a purpose which is practical and closely allied to all reading instruction.

---

1. Gates, Arthur I. and David H. Russell, "Types of Materials Vocabulary Burden, Word Analysis and other Factors in Beginning Reading II", Elementary School Journal, 39÷119-128, October, 1938.

Place for word analysis. It seems to be a point of agreement that instruction in word analysis should be instigated only after an adequate sight vocabulary has been built. What constitutes an adequate sight vocabulary has been placed between seventy-five and two hundred words. A sufficient vocabulary is placed at fifty words by McBroom[1], while Stone[2] holds that the sight vocabulary should be at least one hundred words. In view of the not too great range of difference found in this matter, it seems appropriate to assume that the child should be master of a sight vocabulary of approximately one hundred words before he is exposed to specific training in word analysis. Once again, it will bear mentioning that this training should begin when the child notices differences and similarities in word forms.

Brownell[3], in a study he made concerning current practices in the teaching of phonics, found that more emphasis is given phonics in second grade than in first. This fact coincides with the previously mentioned research pertaining to a mental age of seven being necessary to success in using word analysis.

---

[1] McBroom, Maude, et al., "Newer Practices in Reading in the Elementary School", 17th Yearbook, The National Elementary Principal, 18:#7, July, 1938.

[2] Stone, Clarence, Better Primary Reading. Webster Publishing Company, St.Louis, Missouri, 1936. p. 403.

[3] Brownell, W. A. "Current Practices with Respect to Phonetic Analysis in Primary Grades", Elementary School Journal, 42:195-206, November, 1941.

In regard to the place in the daily program for special training, McBroom[1] found it advisable to give this practice in a period apart from the regular reading period. This is in order to eliminate any possibility of the mechanics of reading interferring with reading's chief function of serving as a thought-getting process. But research by Tate[2] refutes the desirability of devoting special time to phonics. He found that this tends to overemphasis phonics at the expense of rapidity in reading and skill in comprehension. But because his study also indicates that a special period for phonics assisted to a great degree the building of skill in word-recognition, it would seem to point out that time devoted exclusively to word analysis is of value only when the other necessary phases of reading instruction,i.e., speed and comprehension, are not neglected. This further establishes the writer's contention that phonic training is merely one of many tools.

Phases of word analysis to be considered. Durrell[3]

---

[1] McBroom, op. cit.,p. 315.

[2] Tate, H. L., "Influence of Phonics on Silent Reading in Grade I", Elementary School Journal,37:752-763, June, 1937.

[3] Durrell, Donald D., Improvement of Basic Reading Abilities. World Book Company, Yonkers-on-Hudson, New York, 1940. p. 198.

mentions these phases of word analysis as being important: ear training for growth of skill in handling auditory elements of words; visual training for growth of skill in recognizing visual elements which accompany word sounds; practice in using these skills with independence.

It seems to be well established through the research of Murphy[1] that the ability to hear similarities and differences in the sounds of words improves rapidly under specific instruction. All of the children in her experimental groups exceeded the mean for the control group, and no child in the control group equalled the mean of the experimental group.

In a study by Schmidt[2], certain reading habits indicated that there is a preference for auditory rather than visual presentation of instructional material. Her study was concerned with children who were referred to her as being severe remedial cases. She found that with children of severe reading disability who were auditory learners, the auditory instruction was more efficient than non-auditory techniques. The value of auditory presentation was noted in that these retarded readers were able to read if material presented to them were taught by auditory methods. It would thus appear that auditorially presented material would have value with children reading normally.

---

1. Murphy, Helen A., "An Evaluation of Exercises for Developing Auditory Discrimination in Beginning Reading", Unpublished M.A. Thesis, Boston University, 1940.

2. Schmidt, Bernadine, "Auditory Stimuli in the Improvement of Reading", Elementary English Review, 18:149-154, April, 1941.

That difficulty in word mastery is often auditory was established by Durrell[1], who found that faulty enunciation is often the cause of confusion in learning.

The importance of auditory discrimination is further borne out by Gray[2], who maintains it is one of seven essential components of reading readiness.

As a result of her study concerning matching ability as a factor in first grade reading, Smith[3] claims that progress in word recognition is hampered until the child has developed the ability of visual discrimination and is able to match word forms. It is necessary to gain a clear visual impression in order to gain a percept of any new word and know that it is different from every other word. This she found to be a basic element in beginning reading. Her study was based on the assumption that the child who matches well has greater success in reading than the child who is poor in this technique. As a result of this study, it is indicated that matching ability is an important factor.

---

1. Durrell, Donald D., "Confusions in Learning", Education, 52:330-333, February, 1932.

2. Gray, W. S., "The Teaching of Reading: A Second Report", Thirty-Sixth Yearbook, National Society for the Study of Education, Part I. Public School Publishing Company, Bloomington, Illinois, 1937. pp. 81-85.

3. Smith, Nila B., "Matching Ability as a Factor in First Grade Reading", Journal of Educational Psychology, 28:560-570, November, 1928.

Visual perception or the ability to perceive small differences between pairs of visual items, is very closely associated with reading. Gates[1] found this to be true as the result of an investigation to establish the relationship between this type of perception and reading ability.

Dolch[2] was interested in ascertaining the comparative values of teaching sight syllables versus letter phonics. He concluded that letter phonics serves the more practical purpose, even if the child were to learn sight syllables. Because there are so many syllables to learn, it seems more feasible for the child to develop skill in working out any syllable, rather than learning syllables by sight. This would indicate that a good program in word analysis is needed to give the child this skill.

In a study of the evaluation of exercises for developing visual discrimination in beginning reading, Junkins[3] noted that the ability to see likenesses and differences improves

---

1. Gates, A. I., "A Study of the Role of Visual Perception, Intelligence & Certain Associative Processes in Reading and Spelling", _Journal of Educational Psychology_, 17:433-455, October, 1926.

2. Dolch, E. W., "Sight Syllables versus Letter Phonics", _Elementary School Journal_, 41:38-42, September, 1940.

3. Junkins, Kathryn M., "Construction and Evaluation of Excercises for Developing Visual Dixcrimination in Beginning _Reading_", Unpublished Ed.M. Thesis, Boston University,1940.

by specific teaching. These exercises improved the rate of learning new words and, on tests of visual discrimination, the experimental group was superior to the control group despite the fact that the control group had the advantage of a better mean mental age.

Regarding which phase of word analysis should be presented first to the child as being least difficult, a study by Murphy[1] showed that the initial sounds were easiest to recognize, followed by initial blends, rhymes and final consonants. Biggy[2] established a relative order of difficulty of word elements in auditory discrimination. She investigated, and placed in order of difficulty, twelve beginning sounds, five beginning blends, nine final sounds, and five rhymes. It was found that "g" is the easiest initial sound, while "w" is the most difficult sound to learn. Smith[3] investigated the relative difficulty of matching lower case letters with capital

---

[1] Murphy, Helen A., "An Evaluation of the Effect of Specific Training in Auditory and Visual Discrimination on Beginning Reading", Unpublished Ed.D. Thesis, Boston University, 1943.

[2] Biggy, Mary Virginia, "The Establishment of a Relative Order of Difficulty of Word Elements in Auditory Discrimination", Unpublished Ed.M. Thesis, Boston University, 1946.

[3] Smith, op. cit., p. 560-570.

letters and perceived that it is less difficult to match capital letters than it is to match lower case letters.

It is therefore necessary for an instructor in the techniques of auditory and visual discrimination to become well acquainted with the order of difficulty of the various steps in word analysis.

Conclusions drawn from research. Training in word analysis should be built upon the following points which research has shown to be of most value in improving reading ability:

1. An adequate sight vocabulary should be developed before specific training in word analysis is introduced.

2. Phonics readiness should be reached, a mental age of seven years, before he is given training in phonics. This does not necessitate wainting for the child to become ready. He may be prepared to a great extent. This is the initial step in the program.

3. Phonics should be regarded as only one of many tools used in teaching of reading. It should be use in order that the child may be made ready to help himself. It must be supplemented by the teaching of sight words, use of configuration and context clues in reading, and should work toward the ultimate goal of reading as a thought-getting process.

4. Only those word elements which are to be of most use to the child in word attack should be taught. The words should be familiar and meaningful.

5. In using phonics, only words which are in the child's known vocabulary should be used. If work in word analysis centers around words which are in his vocabulary, the double problem of not knowing how to attack a word, and not knowing the meaning of the word is avoided.

6. Both the visual and the auditory phases of word analysis must be developed. It is through the combined use of skills in both phases that ability in reading is gained.

7. While some children will benefit more than others from intensive instruction in word analysis, the learning rate of children has been increased as a result of intensive instruction in auditory and visual discrimination.

CHAPTER II

PLAN OF THE STUDY

The purpose of this study is to ascertain the effect of intensive instruction in word analysis, over a given period, on reading achievement in second grade.

Two second grades, in a school in a small industrial city, were homogeneously grouped and used for the study. Although fifty-nine children were tested, due to absences, the scores of fifty-six were used in the final analysis of data, twenty-eight in each group.

In the control group there were four boys and twenty-four girls, while in the experimental group there were eleven boys and seventeen girls.

The study covered a period of eight weeks. The control group was taught by the regular class-room teacher, and the experimental was taught by the writer. The control group was taught according to the manuals of the basal reading texts in use. The class was divided into three reading groups, on different reading levels. No instruction in word analysis, other than that included in the manuals, was given this group. The time alloted for reading instruction in the control group was twenty minutes for each reading group, morning and afternoon.

The experimental group was taught according to the manuals of the basal reading texts in use. The class was divided into three reading groups, on different levels of

reading,as was the control group. The time alloted for reading instruction in the experimental group was twenty minutes for each reading group, morning and afternoon. But in addition to this regular reading instruction, the experimental group was given fifteen minute periods of intensive instruction in word analysis each morning, followed by fifteen minutes of supplementary seatwork in word analysis.

The lessons forming the intensive practice in word analysis were based on the plans in Building Word Power[1], and the supplementary seatwork followed the plans and the suggestions in Ready to Read[2].

At the beginning of the eight week period covering the study, both groups were given the Kuhlmann-Anderson[3] Intelligence Test, Grade II, Fifth Edition. They were then given the Metropolitan Achievement Test[4], Primary II Battery, Form R.

---

[1] Durrell, Donald D., et al., Building Word Power, World Book Company, Yonkers-on-Hudson, New York, 1945.

[2] _______, Ready to Read. World Book Company, Yonkers-on-Hudson, New York, 1941.

[3] Published by Educational Test Bureau, Minneapolis, 1942.

[4] Published by World Book Company, Yonkers-on-Hudson, New York, 1948.

At the end of the eight weeks, the two groups were tested by Form S[1] of the same achievement test.

In the analysis of data, the mental ages used were taken from the intelligence test just mentioned. The reading scores were taken from the achievement tests, both forms previously mentioned. The chronological ages were taken from the office record cards of the school. All tests were scored and checked by the classroom teacher and the writer.

The scores used in the analysis of data on reading achievement tests were standard scores.

---

1. Published by World Book Company, Yonkers-on-Hudson, 1948.

CHAPTER III

ANALYSIS OF DATA

The data were analyzed to discover:

1. The comparison of the control group and the experimental group as to distribution of mental ages.

2. The comparison of the control group and the experimental group as to distribution of chronological ages.

3. The reading achievement of the control group over the eight week period of the study.

4. The reading achievement of the experimental group over the eight week period of the study.

5. The comparison of the control group and the experimental group as to reading achievement at the beginning of the study in October.

6. The comparison of the control group and the experimental group as to reading achievement at the conclusion of the study in December.

TABLE I

COMPARISON OF CHRONOLOGICAL AGES AND MENTAL AGES IN YEARS AND MONTHS

Group	N	C.A.Mean	M.A.Mean
Control	28	7 yrs.-3.6 mos.	7 yrs.-7.4 mos.
Experimental	28	7 yrs.-3.7 mos.	7 yrs.-3.8 mos.

The mean chronological age of the control group was 7 years and 3.6 months while that of the experimental group was 7 years and 3.7 months. The control group was chronologically .1 month younger than the experimental group.

The mean mental age of the control group was 7 years and 7.4 months while that of the experimental group was 7 years and 3.8 months. The control group was mentally 3.6 months older than the experimental group.

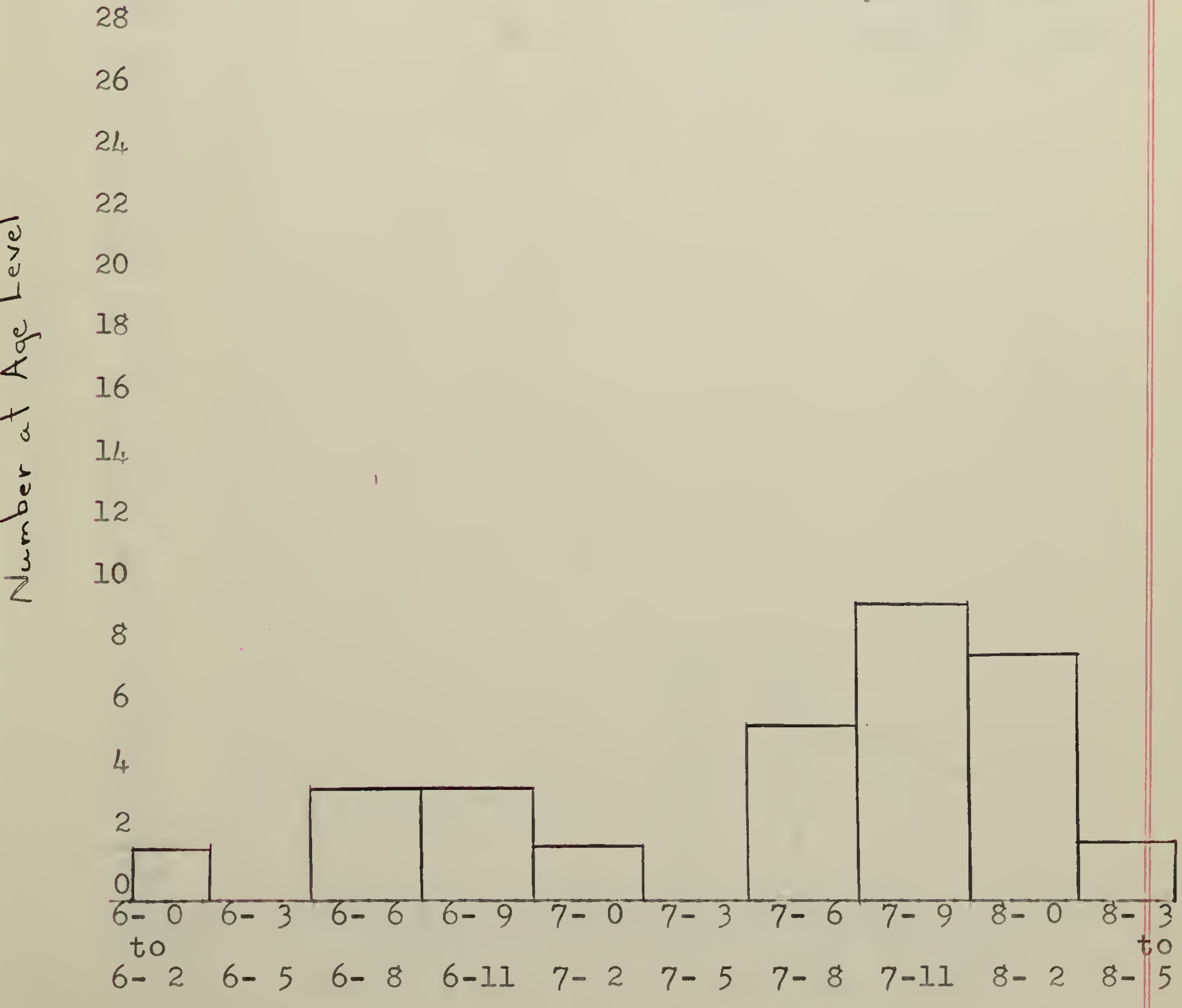
Figure 1

DISTRIBUTION OF MENTAL AGES

CONTROL GROUP

Mean: 7 years, 7 months

Range: 6 years, 0 months
to
8 years. 5 months



Mental Ages in Years and Months

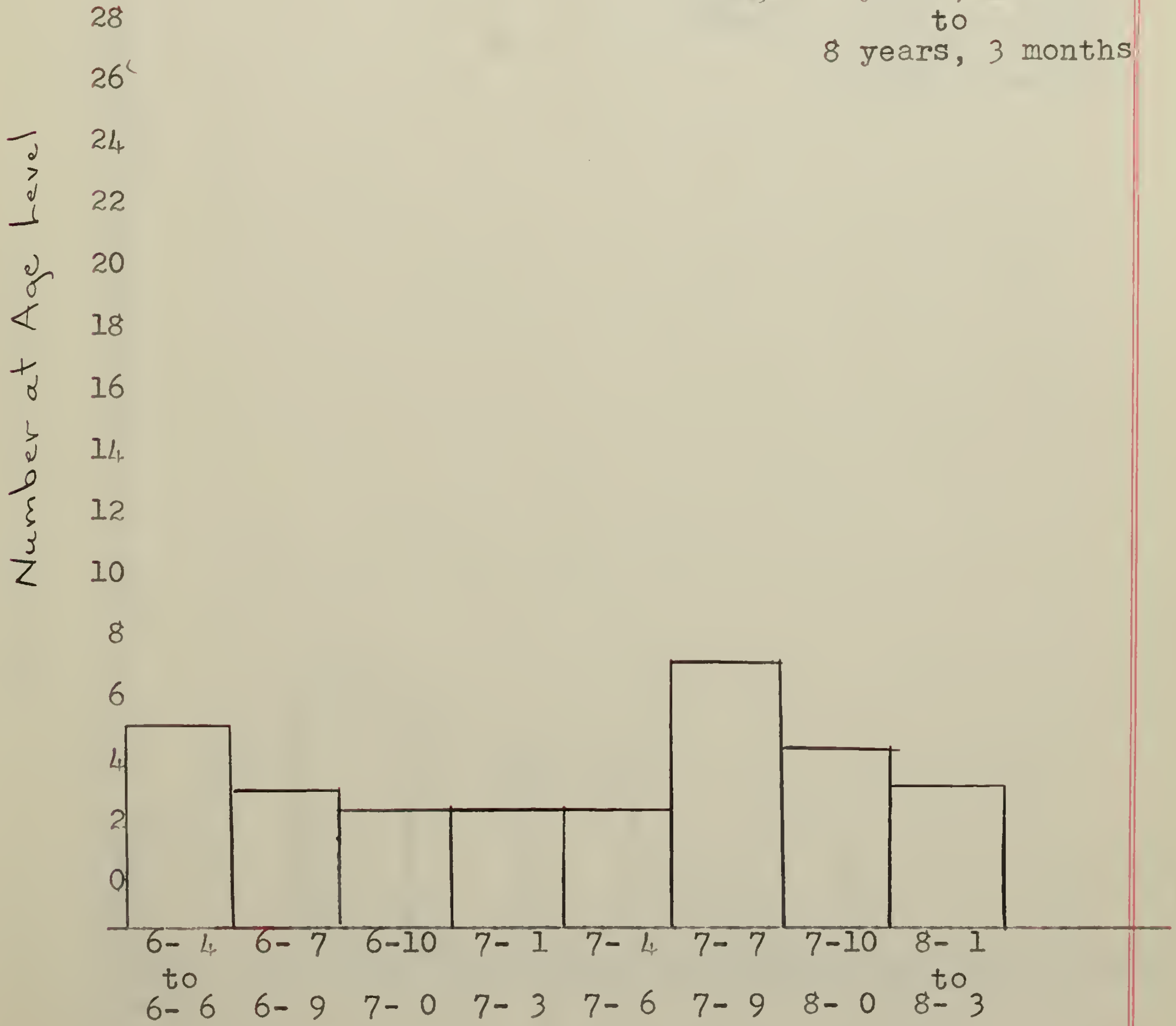
Figure 2

DISTRIBUTION OF MENTAL AGES

EXPERIMENTAL GROUP

Mean: 7 years, 7 months

Range: 6 years, 4 months
to
8 years, 3 months



Mental Ages in Years and Months

Figure 3

DISTRIBUTION OF CHRONOLOGICAL AGES

CONTROL GROUP

Mean: 7 years, 4 months

Range: 6 years, 6 months
to
8 years, 11 months

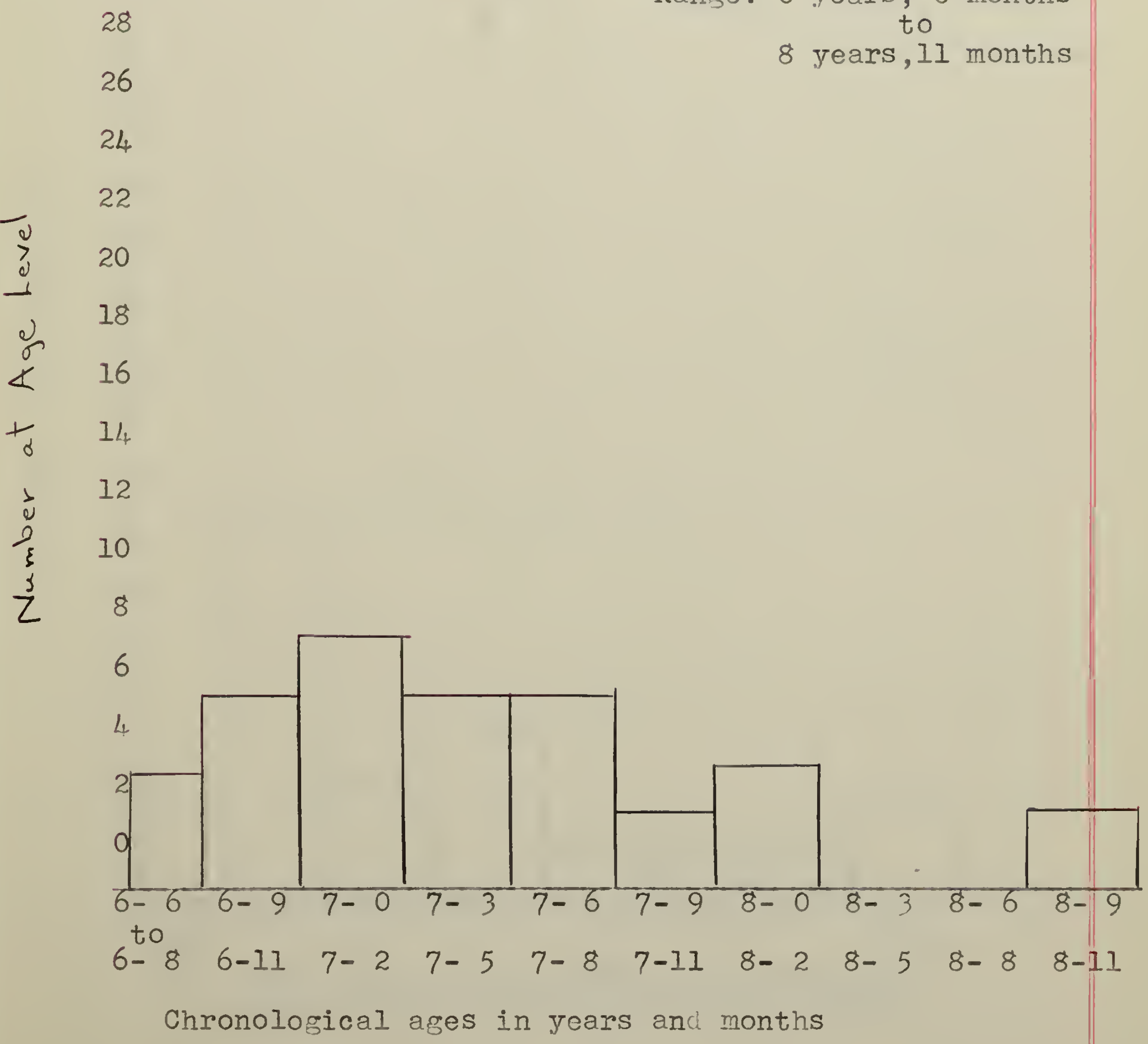


Figure 4

DISTRIBUTION OF CHRONOLOGICAL AGES

EXPERIMENTAL GROUP

Mean: 7 years, 4 months

Range: 6 years, 8 months
to
8 years, 7 months

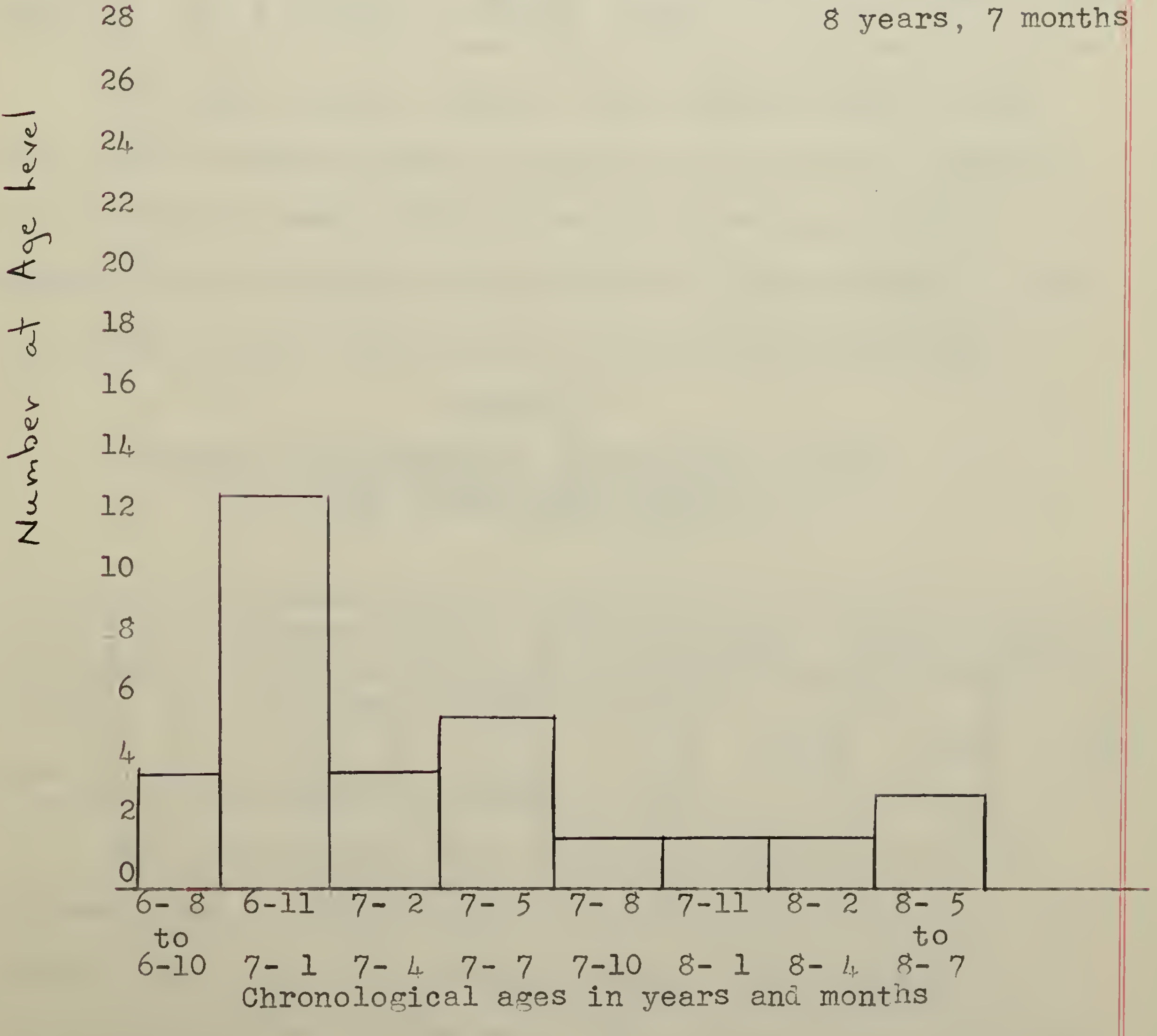


TABLE II

READING ACHIEVEMENT OF CONTROL GROUP OVER EIGHT WEEK PERIOD

Test	N	Mean	S.D.	S.E.$_{M}$.	Diff.	S.E.$_{D}$.	C.R.
Form R	28	127.43	2.92	.56	5.64	2.54	2.22
Form S	28	133.07	12.87	2.48			

The mean standard score of the control group on the test, Form R, administered in October was 127.43 as compared with 133.07, the mean standard score achieved on Form S administered in December. The critical ratio was found to be 2.22 which is not a statistically significant difference.

TABLE III

READING ACHIEVEMENT OF EXPERIMENTAL GROUP OVER EIGHT WEEK PERIOD

Test	N	Mean	S.D.	S.E.$_{M}$.	Diff.	S.E.$_{D}$.	C.R.
Form R	28	119.07	11.69	2.23	11.36	2.31	4.94
Form S	28	130.43	3.24	.62			

The mean standard score of the experimental group on the test, Form R, administered in October was 119.07 as compared with 130.43, the mean standard score achieved on Form S administered in December. The critical ratio was found to be 4.94 which is a statistically significant difference in favor of the achievement test administered in December.

TABLE IV

COMPARISON OF READING ACHIEVEMENT OF CONTROL AND EXPERIMENTAL GROUPS ON FORM R IN OCTOBER

Group	N	Mean	S. D.	S.E.$_M$	Diff.	S.E.$_D$.	C.R.
Cont.	28	127.43	2.92	.56	8.36	2.32	3.60
Exper.	28	119.07	11.69	2.25			

The mean standard score of the control group on the test administered in October was 127.43 as compared with 119.07 for the experimental group. The critical ratio was found to be 3.60 which is a statistically significant difference in favor of the control group.

TABLE V

COMPARISON OF READING ACHIEVEMENT OF CONTROL AND EXPERIMENTAL GROUPS ON FORM S IN DECEMBER

Group	N	Mean	S.D.	S.E.$_M$.	Diff.	S.E.$_D$.	C.R.
Cont.	28	133.07	12.87	2.48	2.64	2.56	1.03
Exper.	28	130.43	3.24	.62			

The mean standard score of the control group on the test administered in December was 133.07 as compared with 130.43 for the experimental group. The critical ratio was found to be 1.03 which is not a statistically significant difference.

CHAPTER IV

SUMMARY AND CONCLUSIONS

It was the purpose of this study to ascertain if an intensive program in word analysis, over a given period, would increase achievement in reading in second grade.

Two second grades, heterogeniously grouped, were used as the basis of this study to observe the differences in outcome of achievement tests in reading between a group receiving specific training in auditory and visual discrimination and a group not receiving the additional training.

The groups, control and experimental, were comprised of twenty-eight children, after three children were excluded in the analysis of data because of absences on testing days.

The control group was taught by the regular classroom teacher, while the experimental group was taught by the writer. Both teachers scored and checked the test results.

At the beginning of the eight week period covering the study both groups were given the Kuhlmann-Anderson Intelligence Test and the Metropolitan Achievement Test, Form R. At the conclusion of the eight week period both groups were given the Metropolitan Achievement, Form S.

Mental Ages were taken from the Kuhlmann-Anderson Intelligence Test. Standard scores were taken from the Reading Achievement section of the Metropolitan Achievement

Test, Forms R and S. Chronological ages were taken from the school records.

The eight week period of intensive practice in word analysis was given the experimental group in periods of fifteen minutes each morning. The lessons were based on Building Word Power. Supplementary seatwork practice was given for an additional fifteen minute period. This was based on Ready to Read.

The data were analyzed to discover:

1. The comparison of the control group and the experimental group as to distribution of mental ages.
2. The comparison of the control group and the experimental group as to distribution of chronological ages.
3. The reading achievement of the control group over the eight week period of the study.
4. The reading achievement of the experimental group over the eight week period of the study.
5. The comparison of the control group and the experimental group as to reading achievement at the beginning of the study in October.
6. The comparison of the control group and the experimental group as to reading achievement at the conclusion of the study in December.

Conclusions:

1. The control group had an older mean mental age than the experimental group.

    a. The mean mental age of the control group was 7 years and 7.4 months, while that of the experimental group was 7 years and 3.8 months.

    b. This fact is probably significant in view of research showing a close relationship between reading ability and mental age, as well as between phonic ability and mental age.

2. The control group had a younger mean chronological age than the experimental group.

    a. The mean chronological age of the control group was 7 years and 3.6 months, while that of the experimental group was 7 years and 3.7 months. The control group was chronologically .1 month younger than the experimental group.

    b. This fact is not significant in view of the small amount of relationship between reading and ability and chronological age.

3. There was not a significant difference in reading achievement between Form R and Form S for the control group.

    a. In comparing the achievement of the control group over the eight week period of the study, it is noted that on Form R, administered in October, the mean standard score was 127.43 as compared with Form S which was administered in December, on which the mean standard score was 133.07.

    b. The critical ratio was 2.22, which is not a statistically significant difference.

4. There was a significant difference in reading achievement between Form R and Form S for the experimental group.

    a. In comparing the achievement of the

experimental group over the eight week period of the study, it is noted that on Form R, administered in October, the mean standard score was 119.07 as compared with Form S, which was administered in December, on which the mean standard score was 130.43.

b. The critical ratio was 4.94, a statistically significant difference.

5. There was a significant difference between the control group and the experimental group as to reading achievement at the beginning of the eight week period of the study.

    a. In comparing the achievement of both the control and experimental groups on Form R of the achievement test administered in October, it is noted that the mean standard score of the control group was 127.43 as compared with 119.07 for the experimental group.

    b. The critical ratio was 3.60 in favor of the control group, a statistically significant difference.

6. There was no significant difference between the control group and the experimental group as to reading achievement at the end of the eight week period of the study.

    a. In comparing the achievement of both the control group and the experimental group on Form S of the achievement test administered in December, it is noted that the mean standard score for the control group was 133.07 as compared with 130.43 for the experimental group.

    b. The critical ratio was 1.03, which is not a statistically significant difference. This would indicate that the experimental group more nearly approximated, in reading achievement, the control group at the end of the eight week period of the study.

SUGGESTIONS FOR FURTHER RESEARCH

1. Compare the groups as to difference in reading achievement according to sex.

2. Compare the groups as to difference in reading achievement according to socio-economic background.

3. Compare the groups as to average gain in reading achievement of each child.

4. Compare the results of the tests used in this study with Form T or Form U of the same achievement test in order to see how closely the groups approximate one another after the lapse of time from December to June.

BIBLIOGRAPHY

BIBLIOGRAPHY

Biggy, Mary Virginia, "The Establishment of a Relative Order of Difficulty of Word Elements in Auditory Discrimination". Unpublished Ed.M. Thesis, Boston University, 1947.

Barden, Mary C., "The Construction and Evaluation of Exercises for Specific Training in Auditory and Visual Discrimination in Third and Fourth Grades". Unpublished Ed.M. Thesis, Boston University, 1945.

Broadbent, Janet, "A Workbook for Teaching Word Analysis Skills at the Primer Level". Unpublished Ed.M. Service Paper, Boston University, 1946.

Brownell, W. A., "Current Practices with Respect to Phonetic Analysis in Primary Grades", Elementary School Journal, 42:195-206, November 1941.

Dolch, E. W., "Sight Syllables versus Letter Phonics", Elementary School Journal, 41:38-42, September, 1940.

Dolch, E. W., and Maurine Bloomster, "Phonic Readiness", Elementary School Journal, 38:201-205, November, 1937.

Durrell, Donald D., "Confusions in Learning", Education, 52:330-333, February, 1932.

_______, Improvement of Basic Reading Abilities. World Book Company, Yonkers-on-Hudson, New York, 1940. 407 pp.

Durrell, Donald D., et al., Building Word Power. World Book Company, Yonkers-on-Hudson, New York, 1945. 102 pp.

_______, Ready to Read. World Book Company, Yonkers-on-Hudson, New York, 1941. 66 pp.

Gates, Arthur I., "A Study of the Role of Visual Perception, Intelligence, and Certain Associative Processes in Reading and Spelling", Journal of Educational Psychology, 17:433-455, October, 1926.

Gates, Arthur I. and David H. Russell, "Types of Materials, Vocabulary Burden, Word Analysis and Other Factors in Beginning Reading. II", Elementary School Journal, 39:119-128, October, 1938.

Good, Carter V., Editor, Dictionary of Education. McGraw-Hill Book Company, New York, 1945. pp. 23, 135, 297.

Gray, William S., "The Teaching of Reading: A Second Report", Thirty-Sixth Yearbook of the National Society for the Study of Education, Part I. Public School Publishing Company, Bloomington, Illinois, 1937. pp. 81-85.

Harrison, Lucille, "Developing Readiness for Word Recognition", Elementary English Review, 23:122-131, March, 1946.

Junkins, Kathryn M., "Construction and Evaluation of Exercises for Developing Visual Discrimination in Beginning Reading". Unpublished Ed.M. Thesis, Boston University, 1940.

McBroom, Maude and L.M. Fertsch, Cecelia Galvin, "Newer Practices in Reading in the Elementary School", 17th Yearbook, The National Elementary Principal, 18#7, July, 1938.

McKee, Paul, "Certain Matters of Importance in Teaching Reading", Elementary English Review, 16:115-118, April, 1937.

Murphy, Helen A., "An Evaluation of Exercises for Developing Auditory Discrimination in Beginning Reading". Unpublished M.A. Thesis, Boston University, 1940.

_______, "An Evaluation of the Effect of Specific Training in Auditory and Visual Discrimination on Beginning Reading". Unpublished Ed. D. Thesis, Boston University, 1943.

Murphy, Helen A. and Kathryn M. Junkins, "Increasing Rate of Learning in First Grade Reading", Education, 62:37-39, September, 1941.

Schmidt, Bernadine, "Auditory Stimuli in the Improvement of Reading", Elementary English Review, 18:149-154, April, 1941.

Smith, Nila Banton, "Matching Ability as a Factor in First Grade Reading", Journal of Educational Psychology, 28:560-570, November, 1928.

Stone, Clarence R., Better Primary Reading. Webster Publishing Company, St. Louis, Missouri, 1936. 536 pp.

Tate, H. L. "Influence of Phonics on Silent Reading in Grade I", Elementary School Journal, 37:752-763, June, 1937.

Tiffin, J. and M. McKinnis, "Phonic Ability--Its Measurement and Relation to Reading Ability", School and Society, 51:190-192, February 10, 1940.

Wilson, F. and C. Flemming, "Letter Consciousness of Beginners in Reading", *Journal of Genetic Psychology*, 53:273-285, 1938.

BOSTON UNIVERSITY
1 1719 02563 4314